

BUILDING CODE COMPLIANCE OFFICE

METRO-DADE FLAGLER BUILDING 140 WEST FLAGLER STREET, SUITE 1603 MIAMI, FLORIDA 33130-1563 (305) 375-2901 FAX (305) 375-2908

> CONTRACTOR LICENSING SECTION (305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION (305) 375-2966 FAX (305) 375-2908

> PRODUCT CONTROL DIVISION (305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

**Efco Corporation** 1000 County Road Monett ,MO 65708

Your application for Notice of Acceptance (NOA) of:

Series "2600 System II" Outswing Aluminum Casement Window - Impact Resistant under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

**ACCEPTANCE NO.: 00-0207.12 EXPIRES: 09/20/2006** 

Raul Rodriguez

**Chief Product Control Division** 

# THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above. Man ares Quintera

Francisco J. Quintana, R.A.

Director

Miami-Dade County

**Building Code Compliance Office** 

APPROVED: 09/20/2001

**ACCEPTANCE No.:** 00-0207.12

APPROVED

SEP 2 0 2001

**EXPIRES** 

SEP 2 0 2006

### SPECIFIC CONDITIONS NOTICE OF ACCEPTANCE:

#### **SCOPE** 1.

This approves an aluminum casement window, as described in Section 2 of this Notice of 1.1 Acceptance, designed to comply with the South Florida Building Code (SFBC), 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

#### PRODUCT DESCRIPTION 2.

2.1 The Series "2600 System II" Outswing Aluminum Casement Window - Large Missile & Small Missile Impact Resistant and its components shall be constructed in strict compliance with the following documents: Drawing No 1027, Sheets 1 thru 5 of 5, titled "Series-2600 System II Small & Large Missile Impact Casement Window" dated 11/09/00, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P. E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

#### **LIMITATIONS** 3.

3.1 This approval applies to single unit applications and side-by-side installations, as shown in approved drawings.

#### INSTALLATION 4.

- The aluminum casement window and its components shall be installed in strict compliance with the approved drawings.
- **4.2** Hurricane protection system (shutters):
  - 4.2.1 For Large Missile Impact Glass: the installation of this unit will not require a hurricane protection system.
  - For Small Missile Impact Glass: the installation of this unit up to 30 feet above grade, will require a hurricane protection system, but for installations above 30 feet above grade will not require a hurricane protection system.
  - To determine if the glass is large missile or small missile impact resistant, see glazing detail on Sheet 3 of approved drawings.

#### **LABELING** 5.

Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved".

### **BUILDING PERMIT REQUIREMENTS** 6.

- Application for building permit shall be accompanied by copies of the following:
  - This Notice of Acceptance
  - 6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.
  - Any other documents required by the Building Official or the South Florida Building Code 6.1.3 (SFBC) in order to properly evaluate the installation of this system.

Manuel Manuel Perez, P.E. Product Control Examiner

Product Control Division

ACCEPTANCE No.: \_ 00-0207.12

APPROVED

SEP 2 0 2001

**EXPIRES** 

SEP 2 0 2006

### STANDARD CONDITIONS NOTICE OF ACCEPTANCE: \_\_\_

- 1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
- 2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
- 3. Renewals of Acceptance will not be considered if:
  - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
  - b) The product is no longer the same product (identical) as the one originally approved;
  - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
  - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted is no longer practicing the engineering profession.
- 4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
- 5. Any of the following shall also be grounds for removal of this Acceptance:
  - a) Unsatisfactory performance of this product or process.
  - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purpose.
- 6. The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.
- 7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer need not reseal the copies.
- 8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
- 9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

END OF THIS ACCEPTANCE

Manuel Perez, P.E. Product Control Examiner

Product Control Division

ACCEPTANCE No.: 00-0207.12

**APPROVED** 

: SEP 2 0 2001

**EXPIRES** 

SEP 2 0 2006

### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

(For File ONLY. Not part of NOA.)

### A. DRAWINGS

1. Manufacturer's die drawings and sections.

2. Drawing No 1027, Sheets 1 thru 5 of 5, titled "Series-2600 System II Small & Large Missile Impact Casement Window" dated 11/09/00, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P. E.

### B. TESTS

1. Test reports on 1) Air Infiltration Test, per SFBC PA 202-94.

- 2) Uniform Static Air Pressure Test, Loading per SFBC PA 202-94.
- 3) Water Resistance Test, per SFBC PA 202-94.
- 4) Forced Entry Test, per AAMA 1302.5 & SFBC PA 202-94.
- 5) Large Missile Impact Test, per SFBC PA 201-94.
- 6) Cyclic Wind Pressure Loading Test, per SFBC PA 203-94

along with marked-up drawings and installation diagram of an EFCO S2600 System II combination aluminum fixed/project-out, fixed and outswing casement windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0046-0212-99**, dated 02/23/99, signed and sealed by Vinu J Abraham, P.E.

- 2. Test reports on 1) Air Infiltration Test, per SFBC PA 202-94.
  - 2) Uniform Static Air Pressure Test, Loading per SFBC PA 202-94.
  - 3) Water Resistance Test, per SFBC PA 202-94.
  - 4) Forced Entry Test, per AAMA 1302.5 & SFBC PA 202-94.
  - 5) Small Missile Impact Test, per SFBC PA 201-94. (ball bearings)
  - 6) Cyclic Wind Pressure Loading Test, per SFBC PA 203-94

along with marked-up drawings and installation diagram of an EFCO S2600 System II combination aluminum fixed/project-out, fixed and outswing casement windows, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0046-0508-99**, dated from 05/10 to 06/30/99, signed and sealed by Vinu J Abraham, P.E.

### C. CALCULATIONS

- 1. Anchor Calculations and structural analysis, dated 12/29/99, prepared by manufacturer, signed and sealed by Richard DiBlasi, P.E.
- 2. Anchor Calculations, dated 11/28/00, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

Manuel Perez, P.E. Product Control Examiner
Product Control Division

E-1

ACCEPTANCE No.: <u>00-0207.12</u>

**APPROVED** 

SEP 2 0 2001

**EXPIRES** 

SEP 2 0 2006

# NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

(For File ONLY. Not part of NOA.)

### **MATERIAL CERTIFICATIONS** D.

Notice of Acceptance No. 01-0205.02, issued to Solutia, Inc. for their "Saflex / Keepsafe Maximum", approved on 05/17/01 and expiring on 05/21/06.

### **STATEMENTS** E.

Letter of no financial interest, issued by EFCO Corporation on January 18, 2000, signed by Tim Hudson, Senior Applications Designer.

Letter of Code Compliance, issued by R. DiBlasi & Associates, Inc. on January 19, 2000 2.

and signed by Richard DiBlasi, P.E.

Letter of no financial interest, issued by W.W. Schaefer Engineering & Consulting, P.A. 3. on November 28, 2000, signed and sealed by Warren Schaefer, P.E.

Laboratory compliance letter for Test Report No. HTL-0046-0212-99, issued by Hurricane 4.

Test Laboratory, Inc., dated 09/08/99, signed and sealed by Vinu J. Abraham, P.E.

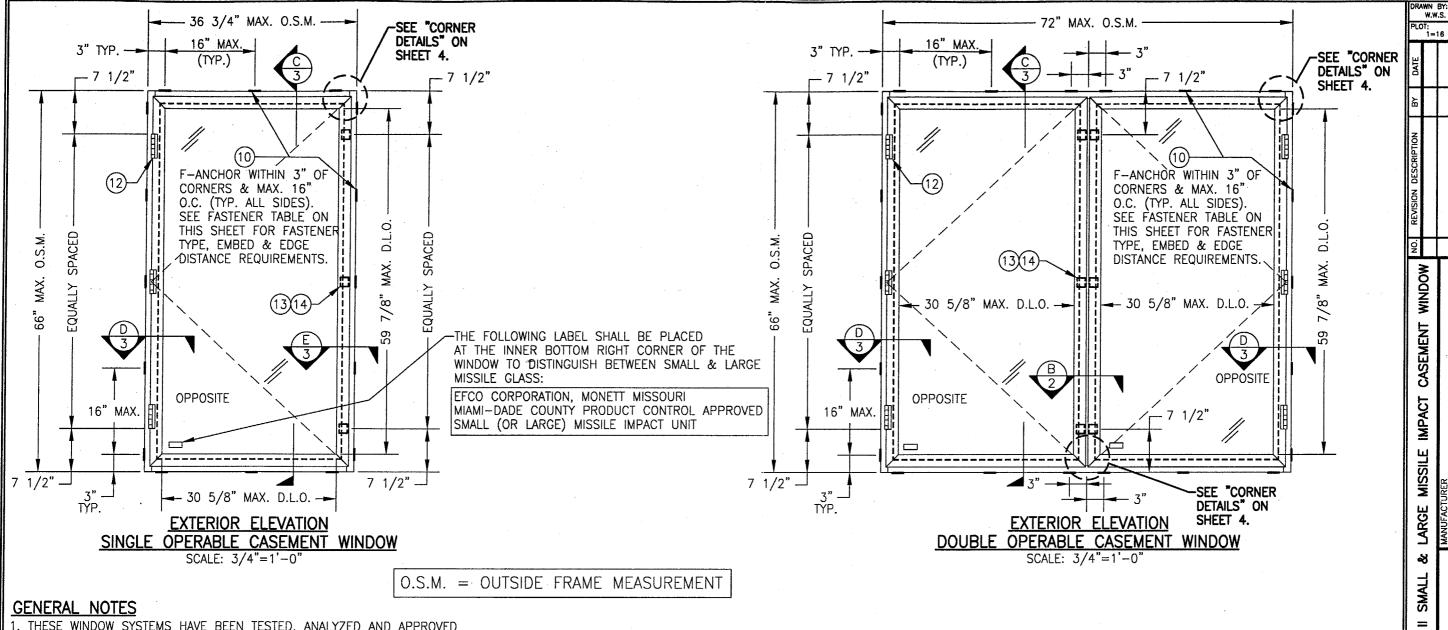
Laboratory compliance letter for Test Report No. HTL-0046-0508-99, issued by Hurricane 5. Test Laboratory, Inc., dated 09/09/99, signed and sealed by Vinu J. Abraham, P.E.

#### **OTHER** F.

1. None.

> Manuel Perez, P.E. Product Control Examiner Product Control Division

E-2



- 1. THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN LOADS" TABLE.
- 2. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE DESIGNED & INSTALLED TO WITHSTAND WIND LOADS AS DETERMINED FOR EA. APPLICATION
- 3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
- 4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH DADE COUNTY PROTOCOLS PA 201, 202 & 203 FOR BOTH LARGE MISSILE IMPACT & SMALL MISSILE IMPACT WINDOWS.
- 5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE, 1994 EDITION.

<sub> </sub>						
CLIP FASTENER REQUIREMENTS TABLE						
OPENING TYPE (SUBSTRATE)	CLIP TO OPENING FASTENER TYPE	NO. FASTENERS PER CLIP INTO SUBSTRATE	MINIMUM EMBEDMENT	MINIMUM EDGE DIST.		
WOOD	NO. 12 SMS SCREW	3	1 1/8"	1"		
MIN. 18 GA. STUD	NO. 12 TEK SCREW	3	FULL	1/2"		
STRUCT. STEEL	NO. 12 TEK SCREW	3	FULL	1/2"		
CMU/CONCRETE	1/4" TAPCON	2	1 1/4"	2"		

LOCK & HINGE	QUANTITY TABLE
WINDOW HEIGHT	QUANTITY REQUIRED
42.5" & SMALLER	2
GREATER THAN 42.5"	3

ALLOWABLE DESIGN LOA	DS & IMPA	CT RATING	
GLAZING DESCRIPTION	IMPACT RATING	ALLOWABLE	PRESSURE
		POSITIVE	NEGATIVE
1/4" HT. STR./0.09" SAFLEX PVB/1/4" HT. STR.	LARGE MISSILE	80 PSF	95 PSF
1/4" HT. STR./0.06" SAFLEX PVB/1/4" HT. STR.	SMALL MISSILE	100 PSF	100 PSF
LOAD TABLE NOTE:			

1. SMALL MISSILE IMPACT WINDOWS MAY NOT BE INSTALED AT A SILL ELEVATION LESS THAN 30 FT. ABOVE GRADE.

APPROVED AS COMPLYING WITH THE
SOUTH ELORIDA BUILDING CODE
DATE SEP 2 0 2001
BY Wantel Parts
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

ACCEPTANCE NO.00 - 0207.12

9 2000 ž N NO NE 1027 SHEET NO.

1 of 5

CHECKED BY

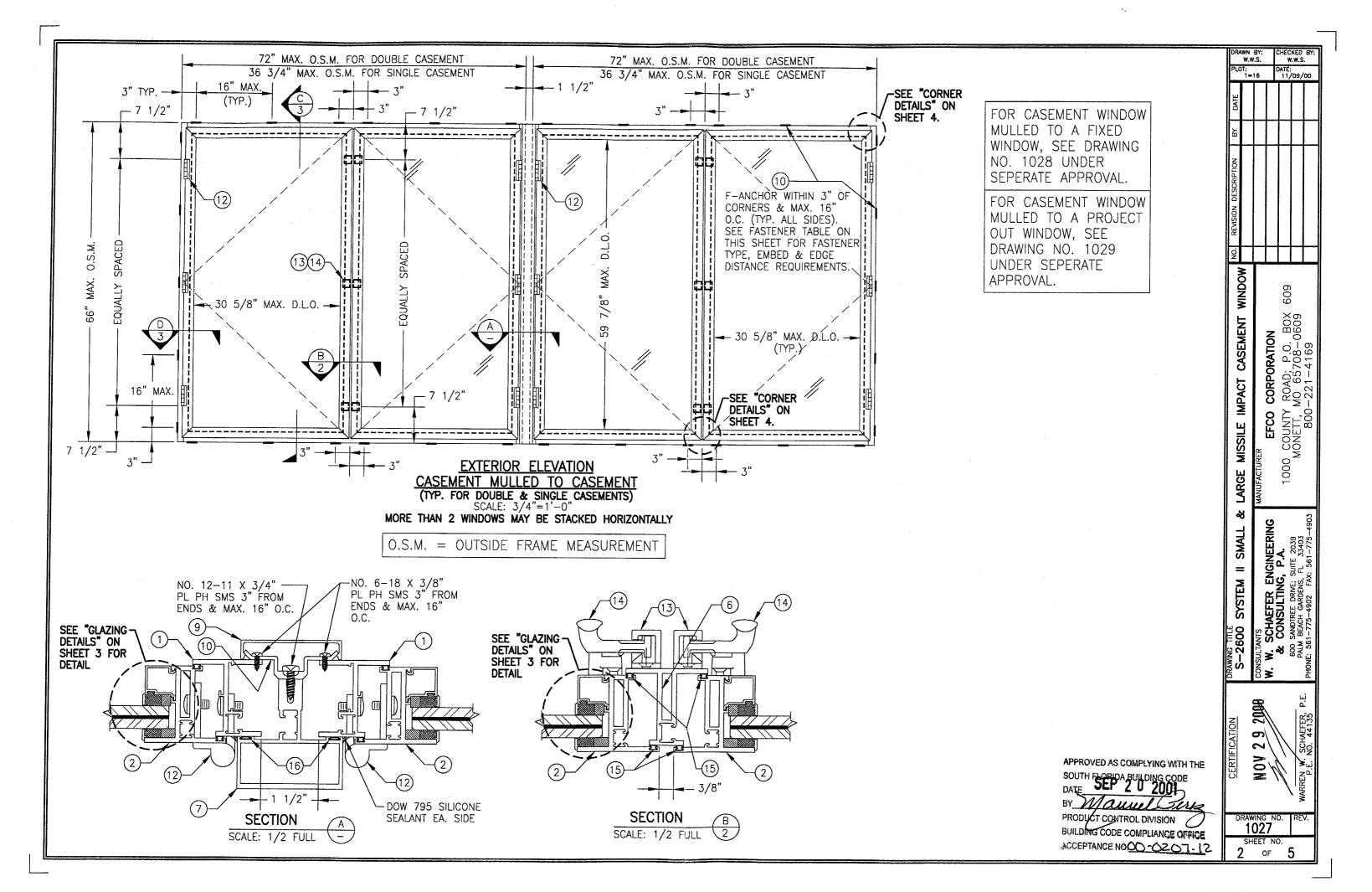
11/09/00

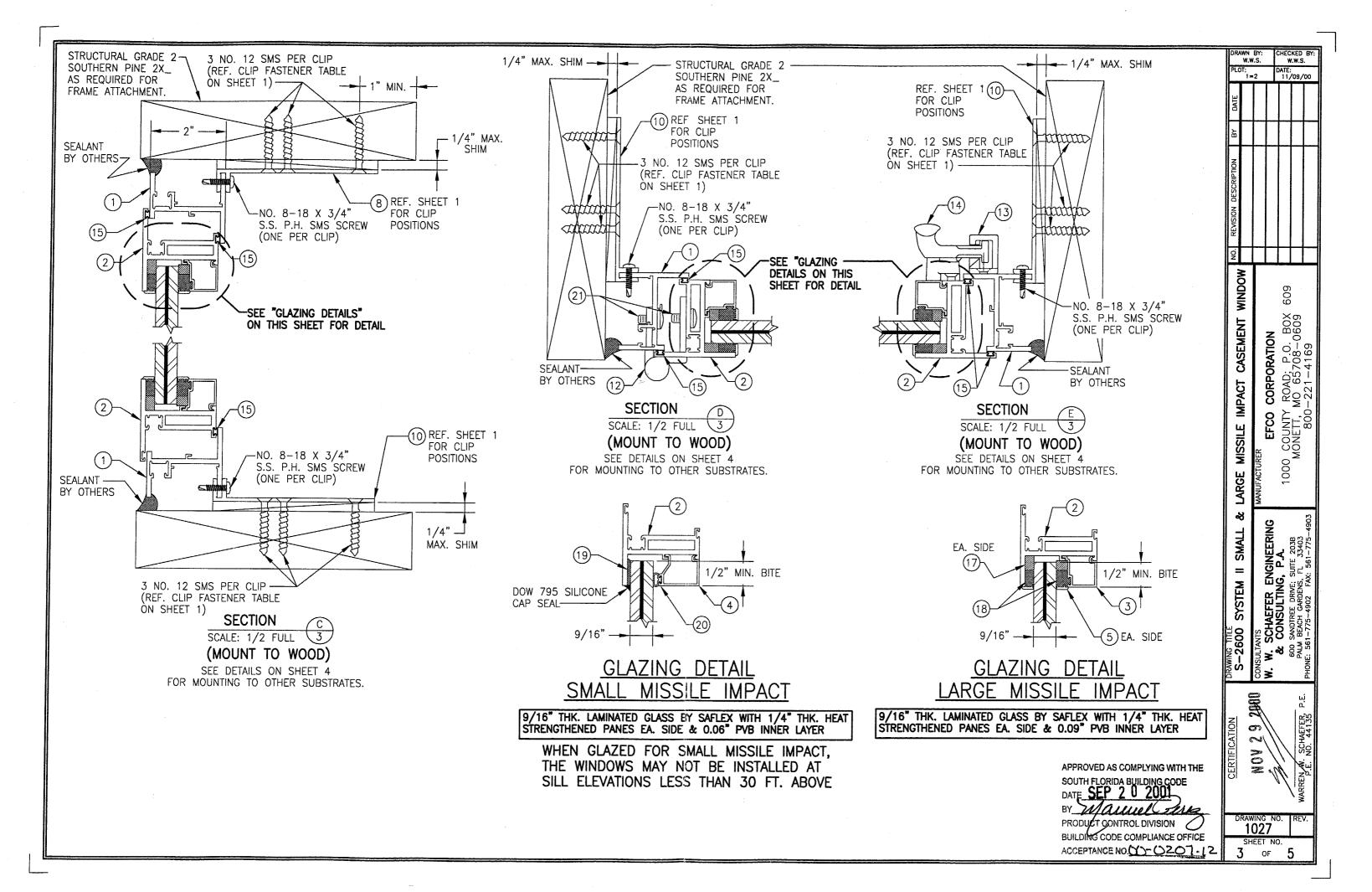
EFCO CORPORATION
COUNTY ROAD; P.O. BOX
ONETT, MO 65708-0609
800-221-4169

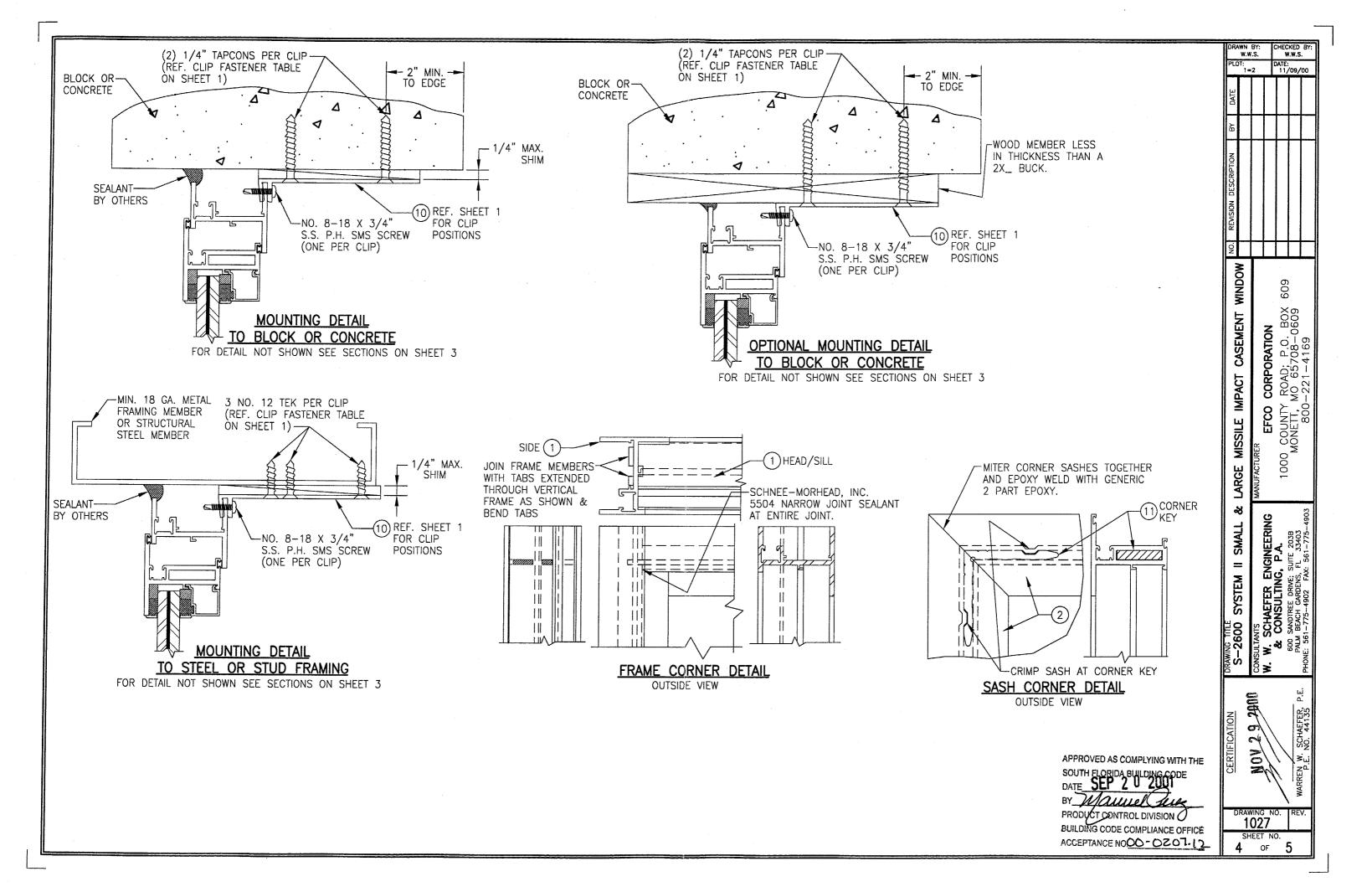
1000 COUNTY MONETT, N 800-

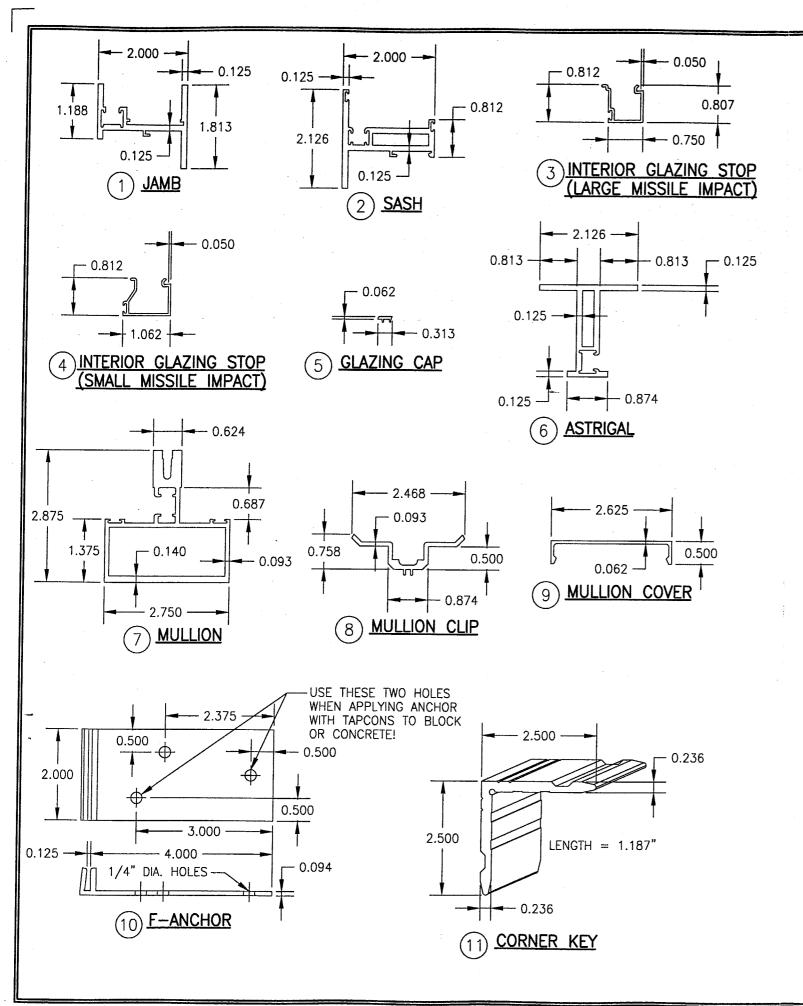
SCHAEFER ENGINEERING CONSULTING, P.A. O SNDTREE DRIVE: SUITE 2038 LM BEACH GARDENS, FL 33403 S61-775-4907 FAX: 561-775-4903

SYSTEM









	ITEM #	PART	ITEM DESCRIPTION	MANUFACTURER/NOTES	
		PARTS			
	1	ET43	JAMB/FRAME	EFCO; 6063-T6 ALUMINUM	
	2	ES56	SASH	EFCO; 6063-T6 ALUMINUM	
	3	ES58	INT. GLAZING STOP (LG. MISSILE IMPACT)	EFCO; 6063-T6 ALUMINUM	
	4	EF04	INT. GLAZING STOP (SM. MISSILE IMPACT)	EFCO; 6063-T6 ALUMINUM	
	5	LB00	GLAZING CAP	FIBER REINFORCED NYLON	
	6	ES54	ASTRIGAL/MEETING RAIL	EFCO; 6063-T6 ALUMINUM	
	7	EG50	MULLION	EFCO; 6063-T6 ALUMINUM	
	8	EE32	MULLION CLIP	EFCO; 6063-T6 ALUMINUM	
	9	EE31	MULLION COVER	EFCO; 6063-T6 ALUMINUM	
	10	KA23/1880	F-ANCHOR	EFCO; 6063-T6 ALUMINUM	
	11	EM45	CORNER KEY	EFCO; 6063-T6 ALUMINUM	
	HARDWARE				
	12	ED71/ED72	BUTT HINGES	EFCO; 6063-T6 ALUMINUM	
	13	HK10	LOCK KEEPER	BRONZE KRAFT (MANGANESE BRONZE)	
	14	HU41	CAM LOCK	BRONZE KRAFT (MANGANESE BRONZE)	
-	SEALS & SEALANTS				
	15	WA04	CONT. VINYL BULB SEAL	CENTRAL PLASTICS	
	16	WVB4	CONT. VINYL BULB SEAL	CENTRAL PLASTICS	
	17	-	3/16 FOAM TAPE	NORTON	
	18	-	DOW 995 SILICONE	DOW CORNING	
	19	-	BACK BEDDING TAPE	TREMCO	
	20	WVB2	CONT. VINYL BULB SEAL	CENTRAL PLASTICS	
L	MISCELLANEOUS FASTENERS				
	21	MP02	1/4-20 X 1/2" PHR SS SCREWS	3 PER HINGE LEG	

APPROVED AS COMPLYING WITH THE SOUTH ELORIDA BUILDING CODE

PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO.00 - 0207-12

NOV 2 9 2000	
RAWING NO. REV.	
SHEET NO.	

CHECKED BY W.W.S.

DATE: 11/09/00

RAWN BY: W.W.S.

> .OT: 1≠2

WINDOW

CASEMENT

LARGE MISSILE IMPACT

શ્ર

SYSTEM II SMALL

609

EFCO CORPORATION

1000 COUNTY ROAD; P.O. BOX

MONETT, MO 65708-0609

800-221-4169

SCHAEFER ENGINEERING
CONSULTING, P.A.
DO SANDTREE DRIVE, SUITE 2038
M. BEACH CARDENS, FL 33403
561-775-4902 FAX: 561-775-4903